AN ANALYSIS OF THE GENUS SALAPIA STÅL WITH DESCRIPTION OF SIX NEW SPECIES, AND SOME TAXONOMIC REARRANGEMENTS (HEMIPTERA: HETEROPTERA: COREIDAE: ACANTHOCEPHALINI)

HARRY BRAILOVSKY AND ERNESTO BARRERA

Instituto de Biología, UNAM, Depto. de Zoología, Apdo Postal No. 70-153, México 04510, D.F. México

Abstract.—Six new species of Salapia Stål from Brazil, Ecuador, and Peru are described and illustrated. Salapia humeralis (Burmeister) is redescribed. Salapia guttifera (Stål) is transferred to the genus Stenometapodus, resulting in the new combination Stenometapodus guttifer (Stål). A key to the known species of Salapia is included.

Key Words.—Insecta, Hemiptera, Heteroptera, Coreidae, Acanthocephalini, Salapia, new species, Brazil, Ecuador, Peru.

Brailovsky (1992) revised the genus Salapia Stål, described four new species, and transferred Laminiceps haenschi Breddin (1901) to Salapia. In the same contribution he added new records for some species, and included a key to the known taxa, except S. humeralis (Burmeister) and S. guttifera (Stål) because the types were not located and the original description was too short to find good characters to separate from the other known species. However, the discovery of the types of S. humeralis and S. guttifera in the Museum der Humboldt Universitat zu Berlin, six undescribed species, and some taxonomical problems made the present analysis, which includes a key to the known species necessary.

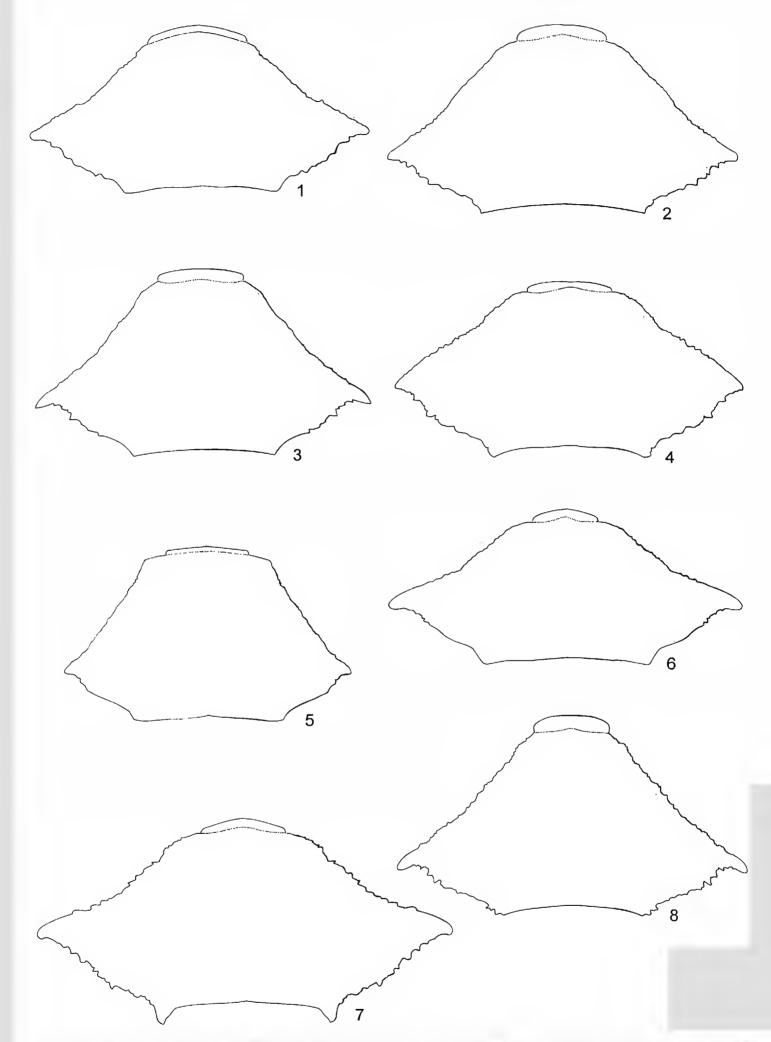
The genus *Salapia* is characterized by an elongate body; cylindrical hind tibiae that is not expanded; rostrum never extending to abdomen with segment IV the shortest, segment II the longest, and segment III longer than I; scutellum longer than wide, humeral angles acute, and metathoracic peritreme with two auricles. The closely related genus *Laminiceps* Costa is similar to *Salapia* except for the body robust, nearly oval, never parallel-sided, the scutellum wider than long, and the humeral angles obtuse, not acute.

Previously, twelve species of Salapia (S. abdominalis (Dallas), S. baraquini (Signoret), S. dimidiata (Dallas), S. guttifera (Stål), S. haenschi (Breddin), S. humeralis (Burmeister), S. luteola Brailovsky, S. nigra Brailovsky, S. pallida Brailovsky, S. pretiosa Blöte, S. selecta Brailovsky, and S. signata (Dallas)) were known. In this paper we add six new species collected in Brazil, Ecuador and Peru, and one species, S. guttifera, is transferred to the genus Stenometapodus, forming the new combination Stenometapodus guttifer.

With this contribution, the current number of species known in Salapia is 17.

SALAPIA CAUCALANDIA BRAILOVSKY AND BARRERA, NEW SPECIES (Figs. 1, 9)

Types.—Holotype: female; data: BRAZIL. Rondonia, vic. Caucalandia, 10°32'S-62°48'W, 160-350 m, 30 October 1991, J. MacDonald. Deposited in Mississippi Entomological Museum, Mississippi State. Paratype: 1 female: BRA-



Figures 1–8. Pronotum of *Salapia* spp. Figure 1. *S. caucalandia* Brailovsky and Barrera, NEW SPECIES. Figure 2. *S. deckerti* Brailovsky and Barrera, NEW SPECIES. Figure 3. *S. vanduzeei* Brailovsky and Barrera, NEW SPECIES. Figure 4. *S. egeri* Brailovsky and Barrera, NEW SPECIES. Figure 5. *S. humeralis* (Burmeister). Figure 6. *S. kondratieffi* Brailovsky and Barrera, NEW SPECIES. Figure 7. *S. onorei* Brailovsky and Barrera, NEW SPECIES. Figure 8. *S. signata* (Dallas).

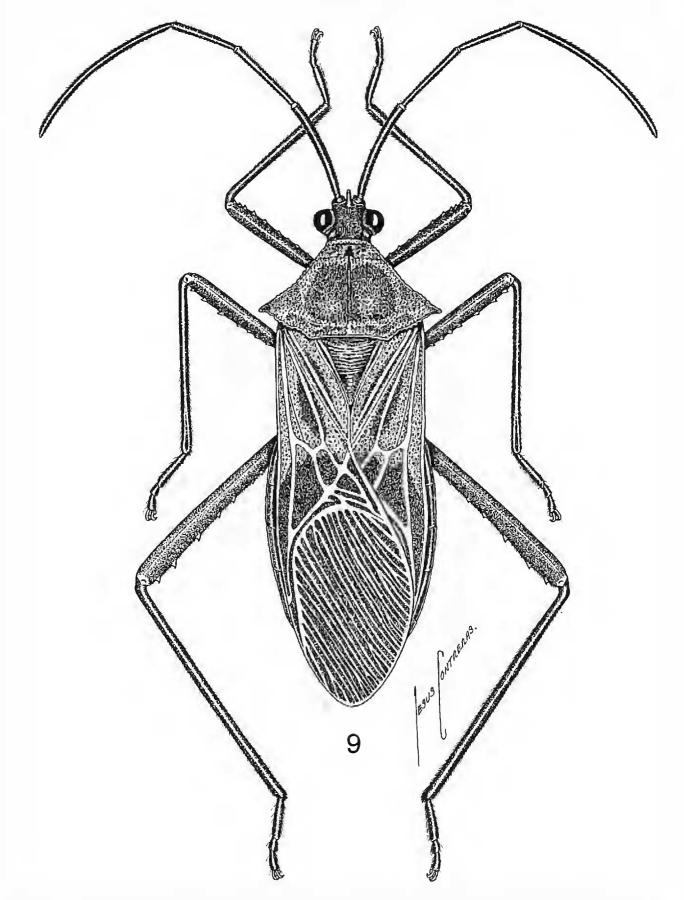


Figure 9. Dorsal view of Salapia caucalandia Brailovsky and Barrera, NEW SPECIES.

ZIL. Rondonia "Austin Trail" (linea C-13) off B-65, 2 km. N. Caucalandia, 21–23 March 1991, Kondratieff and Welch. Deposited in the "Colección Entomológica del Instituto de Biología, UNAM, México."

Description.—Female (holotype). Dorsal coloration. Head including antennal segments I to IV black; pronotum yellow with black discoidal spot on middle third; calli yellow with narrow black longitudinal stripe running on middle third; scutellum black with apex yellow; clavus and corium yellow with claval vein, apical margin of corium, and elongate stripe on endocorium black; hemelytral membrane black; connexival segments with upper margin orange, and inner margin black; abdominal

segments black. *Ventral coloration.* Head dull dark hazel with dirty yellow stripe contiguous to inner face of eye; buccula and rostral segments I to IV shiny black to reddish brown; thorax and legs dull dark hazel, tinged with orange, and following areas shiny reddish brown: acetabulae, anterior and posterior margin of propleura, and posterior margin of mesopleura and metapleura; anterior and posterior lobe of metathoracic peritreme black; abdominal sterna bright reddish brown with hazel reflections; pleural margin of abdominal sterna III to VIII and external face of gonocoxae I bright to dull orange. *Structure.* Head: Rostrum reaching anterior third of metasternum. Pronotum: Humeral angles expanded, apically acute; posterolateral margin denticulate; triangular process shorter (Fig. 1). *Measurements:* Head length including the tylus: 1.45 mm; width across eyes: 2.53 mm; interocular space: 1.00 mm; interocellar space: 0.42 mm; preocular distance: 0.88 mm; length of antennal segments: I, 3.64 mm; II, 3.00 mm; III, 2.44 mm; IV, 6.68 mm. Pronotal length: 4.10 mm; width across frontal angles: 1.80 mm; width across humeral angles: 6.60 mm. Scutellar length: 2.44 mm; width: 2.24 mm. Total body length: 19.10 mm.

Discussion.—Like S. nigra Brailovsky with antennal segments II and III, scutellum, buccula, and abdominal sterna (except pleural margins III to VII orange) black to reddish brown. Salapia caucalandia, can be easily distinguished by the antennal segment IV, and abdominal segments III to V entirely black, and the pronotum yellow with discoidal black spot near middle third. On S. nigra the antennal segment IV is black with discoidal ring yellow, the abdominal segments III to V orange, and the pronotum mostly black.

Distribution.—Only known from Brazil.

Etymology.—Named for its occurrence near Caucalandia.

SALAPIA DECKERTI BRAILOVSKY AND BARRERA, NEW SPECIES (Figs. 2, 10)

Types.—Holotype: female; data: ECUADOR. Camelus, F. V. Feyer. Deposited in the Museum der Humboldt Universitat zu Berlin. Paratype: 1 female: same data as holotype. Deposited in the "Colección Entomologíca del Instituto de Biología, UNAM, México."

Description.—Female (holotype). Dorsal coloration: Head, pronotum, and scutellum orange; antennal segment I reddish brown with inner face ochraceus to orange or entirely dirty orange; antennal segments II and III reddish brown and IV yellow with basal and apical third reddish brown; clavus orange to yellow with broad longitudinal stripe black; corium orange to yellow with 5 black maculae between veins; hemelytral membrane dark ambarine with basal angle, and inner veins darker; connexival segments III to VI reddish with upper border, posterior joint, and inner margin pale orange; connexival segments VII to IX, and dorsal abdominal segments II to IX pale orange. Ventral coloration: Head, buccula, thorax, coxae, trochanters, femora, and abdomen pale orange yellow; rostral segments reddish brown with apical third of segments I to III yellow; tibiae reddish brown with basal joint orange yellow; tarsi reddish brown; anterior and posterior lobe of metathoracic peritreme black. Structure. Head: Rostrum reaching anterior border of metasternum. Pronotum: Humeral angles expanded, apically acute; posterolateral margin denticulate; triangular process shorter (Fig. 2). Measurements. Head length including the tylus: 1.43 mm; width across eyes: 2.60 mm; interocular space: 1.04 mm; interocellar space: 0.44 mm; preocular distance: 0.90 mm; length of antennal segments: I, 4.08 mm; II, 3.16 mm; III, 2.48 mm; IV, 6.80 mm, Pronotal length: 3.96 mm; width across frontal angles: 1.68 mm; width across humeral angles: 6.80 mm. Scutellar length: 2.52 mm; width: 2.32 mm. Total body length: 18.80 mm.

Discussion.—Close to S. luteola Brailovsky with antennal segments II and III black to reddish brown, and pronotum and scutellum entirely yellow to orange. In S. deckerti, the clavus is black with margin yellow to orange, the corium is yellow to orange with 5 black maculae between veins, and ventrally entirely

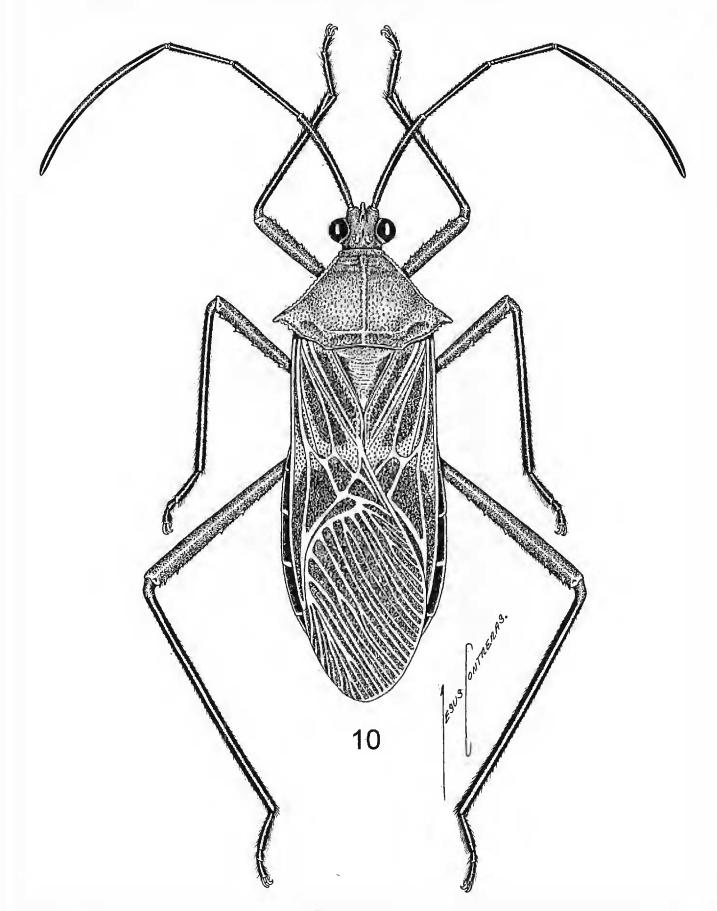


Figure 10. Dorsal view of Salapia deckerti Brailovsky and Barrera, NEW SPECIES.

yellow to orange. In S. luteola the clavus, corium, and ventral region are black to reddish brown, except the orange pleural margin of abdominal sterna III to VI.

Salapia pretiosa Blote also has the antennal segments II and III black to reddish brown, and the scutellum mostly yellow to orange (apical third black), but the clavus is entirely black, the corium black with transverse and straight orange to yellow stripe, and antennal segment IV black to reddish brown and not bicolorous like in S. deckerti.

Distribution.—Only known from Ecuador.

Etymology.—Named for Dr. Jurgen Deckert, distinguished German hemipterist.

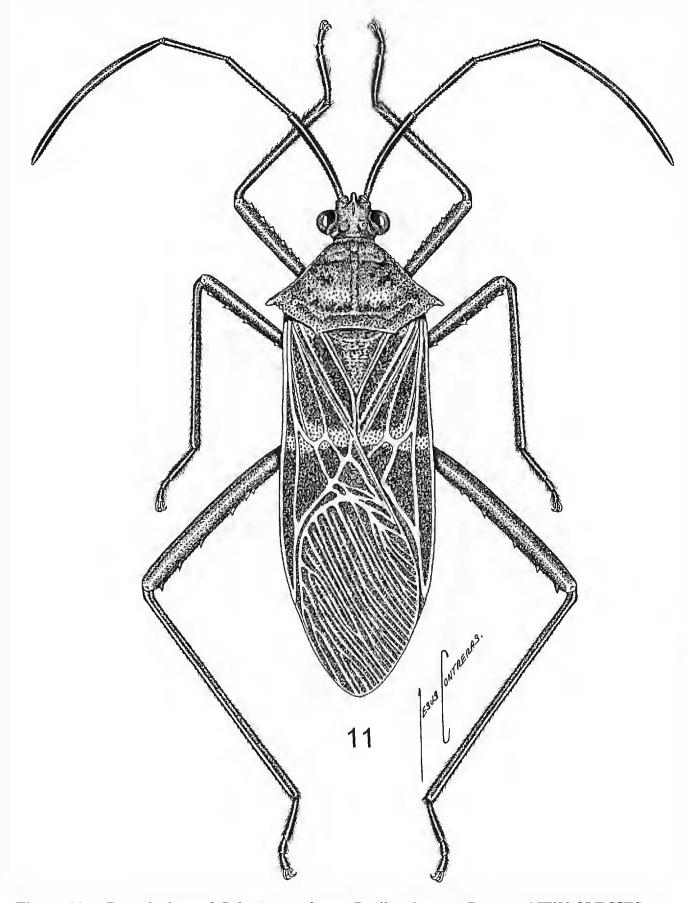


Figure 11. Dorsal view of Salapia vanduzeei Brailovsky and Barrera, NEW SPECIES.

SALAPIA VANDUZEEI BRAILOVSKY AND BARRERA, NEW SPECIES (Figs. 3, 11)

Type.—Holotype: female; data: PERU. Putumayo District, El Encanto, 25 August 1920, Cornell Univ. Expedition, lot 569. Deposited in Cornell University, Insect Collection, Ithaca, New York.

Description.—Female (holotype). Dorsal coloration: Head, pronotum, scutellum, connexival segments and abdominal segments orange; antennal segment I reddish brown with inner face dirty orange; segments II and III reddish brown and IV yellow with basal and apical third reddish brown; tylus reddish brown

with orange reflections; clavus black with basal angle orange; corium black with yellow irregular fascia; hemelytral membrane smoky black, with basal angle darker. *Ventral coloration:* Head, buccula, thorax, coxae, and abdominal sterna orange; rostral segments I to IV, trochanters, femora, tibiae, and tarsi reddish brown; anterior and posterior lobe of metathoracic peritreme black. *Structure*. Head: Rostrum reaching anterior border of metasternum. Pronotum: Humeral angles expanded, apically acute; posterolateral margin denticulate; triangular process shorter (Fig. 3). *Measurements*. Head length including the tylus: 1.45 mm; width across eyes: 2.60 mm; interocular space: 1.00 mm; interocellar space: 0.41 mm; preocular distance: 0.90 mm; length of antennal segments: I, 3.88 mm; II, 3.04 mm; III, 2.44 mm; IV, 6.92 mm. Pronotal length: 3.76 mm; width across frontal angles: 1. 66 mm; width across humeral angles: 6.48 mm. Scutellar length: 2.44 mm; width: 2.36 mm. Total body length: 18.50 mm.

Discussion.—Related with S. luteola Brailovsky, in having antennal segments II and III and legs reddish brown to black, and pronotum and scutellum orange. Salapia vanduzeei, has the head, thorax, coxae and abdomen orange, in S. luteola these structures are reddish brown to black, except the connexival segments and pleural abdominal sterna are orange to yellow.

Distribution.—Only known from Peru.

Etymology.—Named for the late Dr. Edward P. Van Duzee, in recognition of his many fundamental contributions to hemipteran systematics.

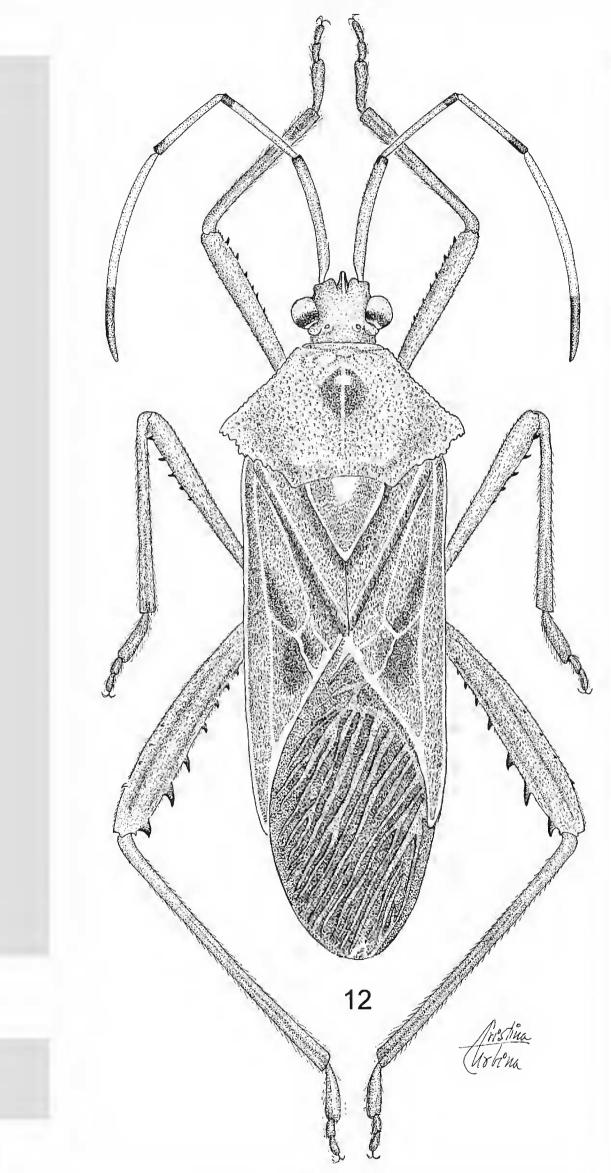
SALAPIA EGERI BRAILOVSKY AND BARRERA, NEW SPECIES (Figs. 4, 12)

Type.—Holotype: female; data: PERU. Sicuani. Deposited in the "Colección Entomológica del Instituto de Biología, UNAM, México."

Description.—Female (holotype). Dorsal coloration: Head pale orange yellow; antennal segments I to III yellow with apical joint reddish brown; segment IV yellow with apical third reddish brown; pronotum pale orange yellow with elongate macula orange brown near to middle third; scutellum orange brown with basal discoidal spot, lateral margins, and apex yellow; clavus pale orange yellow with inner border reddish brown; corium pale orange yellow with 3 reddish brown maculae between veins; hemelytral membrane dark ambarine with basal angle darker; connexival segments III to VI orange brown and VII pale orange; abdominal segments black with creamy yellow longitudinal stripe running from II to posterior margin of segment VII. Ventral coloration: Head, buccula, rostral segments I to IV (apex of IV reddish brown), and legs (spines black to reddish brown) pale yellow to orange; thorax pale orange yellow with following areas orange brown: rectangular spot on propleura; outer margin of mesopleura, and posterior margin of metapleura; anterior and posterior lobe of metathoracic peritreme black; abdominal sterna shiny orange hazel, with creamy yellow discoidal spot lateral to middle line on sterna III to VI. Structure. Head: Rostrum reaching posterior border of mesosternum. Pronotum: Humeral angles expanded, broad, apically with short and broad, spine posterolateral margin denticulate; triangular process broad, well developed (Fig. 4). Measurements. Head length including the tylus: 2.00 mm; width across eyes: 2.52 mm; interocular space: 0.92 mm; interocellar space: 0.50 mm; preocular distance: 1.00 mm; length of antennal segments: I, 3.60 mm; II, 2.76 mm; III, 2.20 mm; IV, 6.28 mm. Pronotal length: 3.72 mm; width across frontal angles: 2.20 mm; width across humeral angles: 6.84 mm. Scutellar length: 2.28 mm; width: 2.20 mm. Total body length: 18.62 mm.

Discussion.—This species is similar in color and general appearance to S. signata (Dallas) in having the head orange yellow and antennal segments I to III yellow to orange with apical joint reddish brown to black. In S. egeri, the acetabulae are entirely orange, the pronotal disc, and scutellum without creamy yellow longitudinal stripe, the corium without transverse yellow fascia and humeral angles are broadened, and apically have a short broad spine (Fig. 4). In S. signata the acetabulae are creamy yellow, and contrast with the orange surface, the pron-







Vol. 75(3)

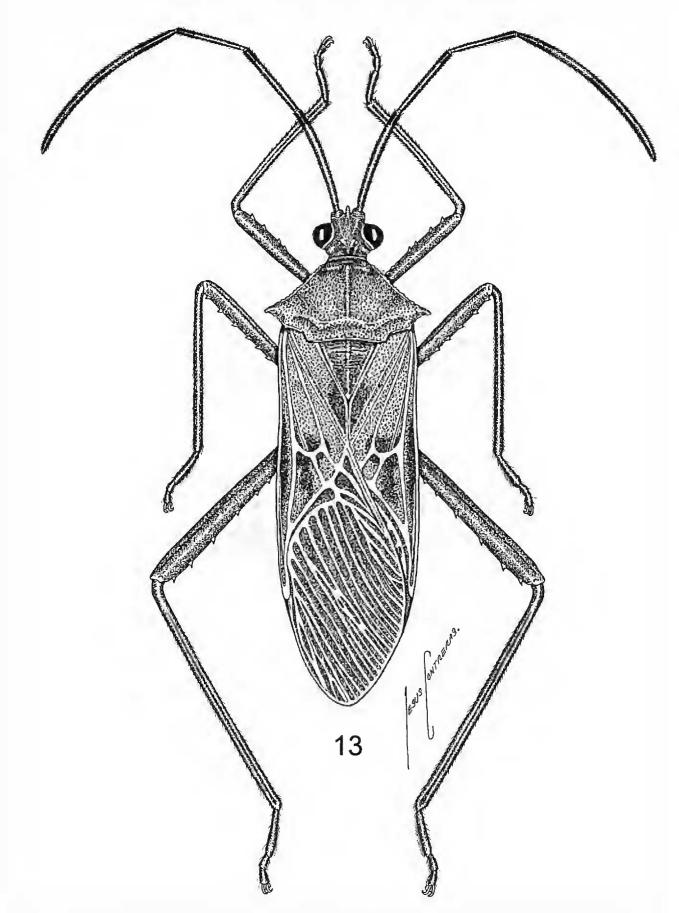


Figure 13. Dorsal view of Salapia kondratieffi Brailovsky and Barrera, NEW SPECIES.

otal disc, scutellum and corium with creamy yellow marks and humeral angles are narrowed, exposed, and apically with long, acute spine (Fig. 8).

Distribution.—Only known from Peru.

Etymology.-Named for Dr. J. E. Eger, distinguished American hemipterist.

SALAPIA KONDRATIEFFI BRAILOVSKY AND BARRERA, NEW SPECIES (Figs. 6, 13)

Types.—Holotype: female; data: BRAZIL. Rondonia, 62 km. SW, Ariquemes, nr. Fazenda Rancho Grande, 6–15 December 1990, D. A. Rider and J. E. Eger.

Deposited in the "Colección Entomológica del Instituto de Biología, UNAM, México". Paratype: 1 female; data: BRAZIL. Rondonia, Linea C-2.5, off B-65, 12.5 km. S. Caucalandia, 17 March 1991, Kondratieff and Welch. Deposited in Colorado State University, Fort Collins, Colorado.

Description.—Female (holotype). Dorsal coloration: Head dark orange hazel; antennal segments I to III yellow orange with apical joint reddish brown; segment IV reddish brown with pale yellow ring near middle third; pronotum dark orange hazel with narrow longitudinal stripe pale yellow orange; scutellum reddish brown with narrow longitudinal stripe pale yellow orange; clavus dark orange with apical third black; corium dark orange with 5 to 6 black maculae between apical veins; hemelytral membrane yellow ambarine with basal angle and space between veins brown; connexival segments reddish brown with upper margin orange; abdominal segments orange. Ventral coloration: Head including buccula dirty yellow with middle third pale brown; rostral segments I and II dirty orange hazel with apical join darker; segments III and IV reddish brown; thorax dark orange hazel with posterior margin of metapleura reddish brown; coxae and trochanters ochraceus to orange hazel with outer margin reddish brown; femora dark orange hazel; tibiae and tarsi pale orange yellow; anterior and posterior lobe of metathoracic peritreme black; abdominal sterna dark orange hazel. Structure. Head: Rostrum reaching anterior border of metasternum. Pronotum: Humeral angles expanded, apically acute; posterolateral margin denticulate; triangular process shorter (Fig. 6). Measurements. Head length including the tylus: 1.45 mm; width across eyes: 2.50 mm; interocular space: 0.98 mm; interocellar space: 0.44 mm; preocular distance: 0.88 mm; length of antennal segments: I, 3.68 mm; II, 2.96 mm; III, 2.44 mm; IV, 6.52 mm. Pronotal length: 3.60 mm; width across frontal angles: 1.68 mm; width across humeral angles: 6.00 mm. Scutellar length: 2.20 mm; width: 1.92 mm. Total body length: 17.70 mm.

Discussion.—Like S. egeri with antennal segments I to III yellow or orange and apically black to reddish brown, the pronotal disc, corium, and acetabulae without creamy yellow marks, and tibiae and tarsi pale yellow. Salapia kondratieffi, differs in having the abdominal sterna III to VI without pale yellow discoidal spots, humeral angles narrow with an acute longer spine (Fig. 6) and antennal segment IV black to reddish brown with yellow ring near middle third. In S. egeri the abdominal sterna III to VI have pale yellowish spots, the humeral angles are broadened with a short, broad apical spine (Fig. 4), and antennal segment IV is yellow with apical third black to reddish brown.

Distribution.—Known only from Brazil.

Etymology.—Named for Dr. Boris C. Kondratieff, distinguished American Plecopterist.

SALAPIA ONOREI BRAILOVSKY AND BARRERA, NEW SPECIES (Figs. 7, 14)

Type.—Holotype: female; data: Ecuador. Sucumbios, San Pablo, Rio Aguarico, October 1995, F. Nischk. Deposited in the "Departamento de Entomología, Pontificia Universidad Católica del Ecuador."

Description.—Female (holotype). Dorsal coloration: Head and corium dark orange hazel; antennal segment I dark orange hazel, II and III yellow orange, and IV pale yellow; pronotum dark orange hazel with humeral angles reddish brown, and a black triangular spot on middle third with the base behind calli, and the apex close to posterior border; scutellum black to reddish brown; clavus dark orange hazel with claval commissure brown; hemelytral membrane ambarine, with basal angle and each margin dark brown; connexival segments dark orange hazel with anterior and posterior joint black; dorsal abdominal segments black with lateral margins and a longitudinal stripe running from II to VI segment yellow. Ventral coloration: Head pale orange hazel with middle third brown; rostral segment I, and basal third of II pale orange hazel, middle and posterior third of segment II and basal half of III reddish brown, and apical half of III and IV dark orange hazel; buccula pale orange hazel; thorax pale orange yellow with following areas reddish brown: acetabulae (outer edge pale orange

1999

Vol. 75(3)

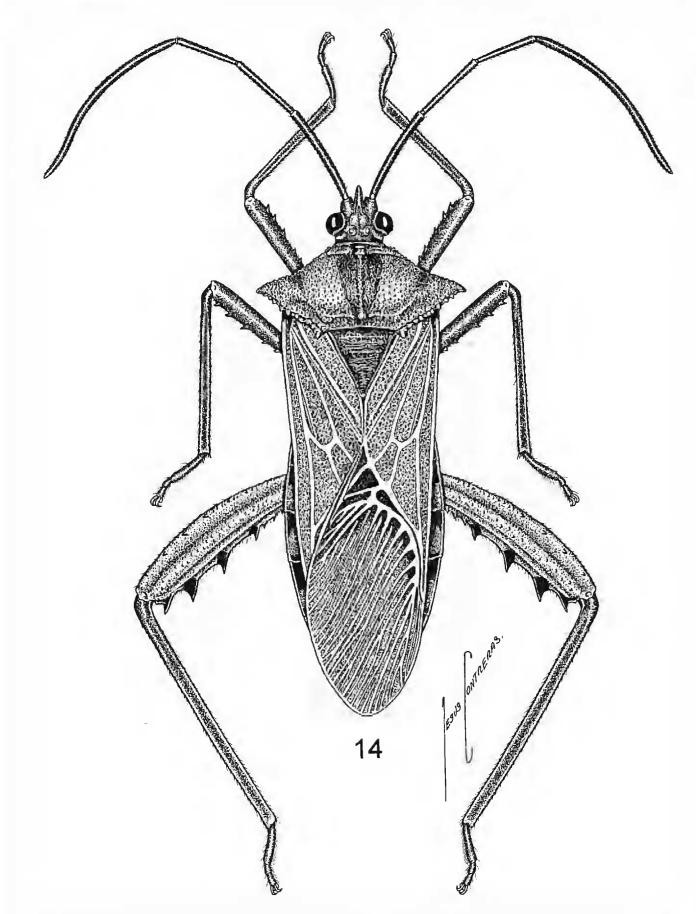


Figure 14. Dorsal view of Salapia onorei Brailovsky and Barrera, NEW SPECIES.

yellow), posterior and outer margin of propleura, mesopleura and metapleura, and prosternum, mesosternum, and metasternum; anterior and posterior lobe of metathoracic peritreme black; coxae dark orange hazel; trochanters, femora, tibiae, and tarsi pale yellow with femoral spines black (hind femora pale orange yellow); abdominal sterna dark orange hazel with posterior margin of sterna III to VII, anterior and posterior joint of pleural sterna III to VII, gonocoxae I (except external angle), and outer margin of paratergite VIII and IX black. *Structure*. Head: Rostrum reaching posterior border of mesosternum. Pronotum: Humeral angles markedly expanded, with the spine large and robust; posterolateral margin conspicuously denticulate; triangular process robust, well developed (Fig. 7). *Measurements*. Head length including the tylus: 2.12 mm; width across eyes: 2.64 mm; interocular space: 1.18 mm; interocellar space: 0.53 mm; preocular distance: 1.28 mm; length of antennal segments: I, 3.88 mm; II, 3.00 mm; III, 2.41 mm; IV, 7.64 mm. Pronotal length: 5.07 mm; width across frontal angles: 1.88 mm; width across humeral angles: 8.04 mm. Scutellar length: 2.60 mm; width: 2.54 mm. Total body length: 19.82 mm.

Discussion.—This new species superficially resembles S. signata (Dallas) in size and shape. S. onorei is, however, readily distinguishable by the humeral angles markedly expanded, posterolateral margins conspicuously denticulate, with triangular process well developed (Fig. 7), pronotal disc and scutellum without creamy yellow longitudinal stripe, and corium without transverse creamy yellow vitta, all of them present in S. signata.

Like S. humeralis (Burmeister), the antennal segments II and III are entirely yellow to orange. In S. humeralis the humeral angles are scarcely expanded, the spine shorter and the triangular process quite small (Fig. 5), the pronotal disc is shiny orange with humeral angles pale yellow, and the acetabulae and posterior margin of propleura, mesopleura, and metapleura creamy yellow. S. onorei differ in the shape of the humeral angles, the length of the triangular process (Fig. 7), and on the general coloration.

In S. egeri, the triangular process of the pronotum are broad, and markedly exposed, both the antennal segments II and III are yellow with apical third black, and the humeral angles are broadened, with the spine shorter and robust (Fig. 4).

Distribution.—Known only from Ecuador.

Etymology.—Named for Dr. Giovanni Onore, distinguished Ecuadorian entomologist.

SALAPIA HUMERALIS (BURMEISTER) (Figs. 5, 15)

Paryphes humeralis Burmeister 1835: 336. Salapia humeralis, Stål 1868: 50.

Types.—Lectotype (here designated): female; data: BRAZIL, Bahia, Gomez nr 1157. Deposited in Museum der Humboldt Universitat zu Berlin, Germany. Paratype: 1 female; data: same data as lectotype. Deposited in Museum der Humboldt Universitat zu Berlin, Germany.

Redescription.—Female (lectotype). Dorsal coloration: Head shiny orange hazel with tylus and antenniferous tubercles yellow; antennal segment I reddish orange with apical joint yellow; segments II and III yellow; segment IV mutilated; pronotum reddish orange with calli orange hazel, and humeral angles yellow; scutellum reddish orange with apex yellow; corium and clavus yellow; hemelytral membrane dark ambarine, with basal angle, veins, and external edge darker; connexival segments III to VI with upper margin yellow and inner margin reddish orange hazel, and segments VII to IX orange hazel; dorsal abdominal segments orange hazel with black longitudinal and irregular stripe running from segment II to VI. Ventral coloration. Head including the buccula and rostral segments I to IV shiny orange hazel; thorax shiny orange hazel with acetabulae, posterior margin of propleura, and small spot on posterior margin of mesopleura creamy yellow, with following areas shiny reddish brown: middle third of propleura, anterior angle of acetabulae, and great portion of mesopleura and metapleura; coxae shiny orange hazel with external face reddish brown; trochanters with outer face reddish brown, and inner face shiny orange hazel; femora reddish brown; tibiae with two reddish brown stripes and two yellow stripes; tarsi yellow; abdominal sterna shiny orange hazel with pleural margins III to VII, and a broad rectangular spot on posterior margin of each sterna and lateral to middle line orange; genital plates shiny orange hazel. Structure. Head: Rostrum reaching posterior border of mesosternum. Pronotum: Humeral angles slightly expanded, apically with short and robust spine; posterolateral margin scarcely denticulate; triangular process conspicuously reduced (Fig. 5). Measurements. Head length including the tylus: 2.00 mm; width across eyes: 2.80 mm; interocular

1999

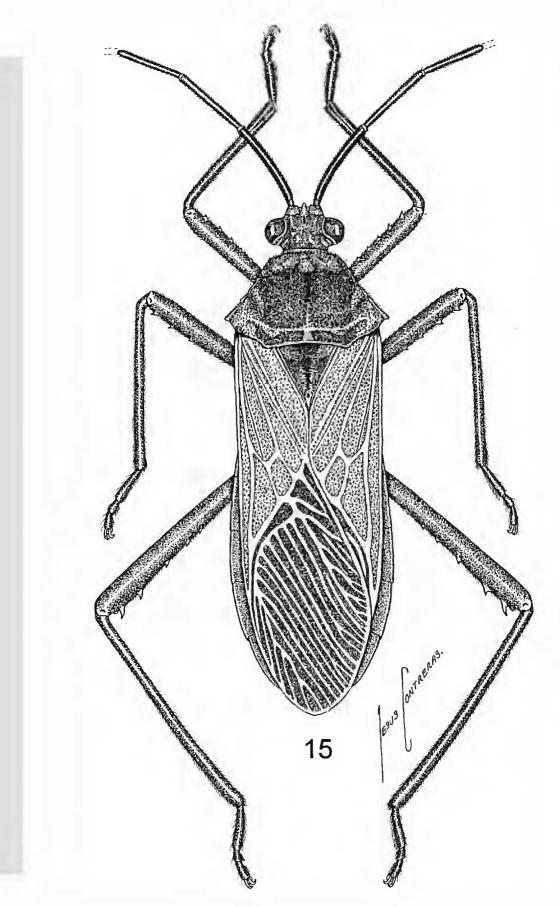


Figure 15. Dorsal view of Salapia humeralis (Burmeister).

space: 1.20 mm; interocellar space: 0.54 mm; preocular distance: 0.92 mm; length of antennal segments: I, 3.32 mm; II, 2.64 mm; III, 2.24 mm; IV, mutilated. Pronotal length: 3.36 mm; width across frontal angles: 1.80 mm; width across humeral angles: 5.60 mm. Scutellar length: 2.20 mm; width: 2.08 mm. Total body length: 17.96 mm.

Discussion.—Paryphes humeralis Burmeister (1835) is known only from the female lectotype and female paralectotype, here designated, which bears the labels "Brazil, Bahia, Gomez, nr. 1157" and deposited in the Museum der Humboldt Universitat zu Berlin, Germany. It was referred to the genus Salapia by Stål (1868).

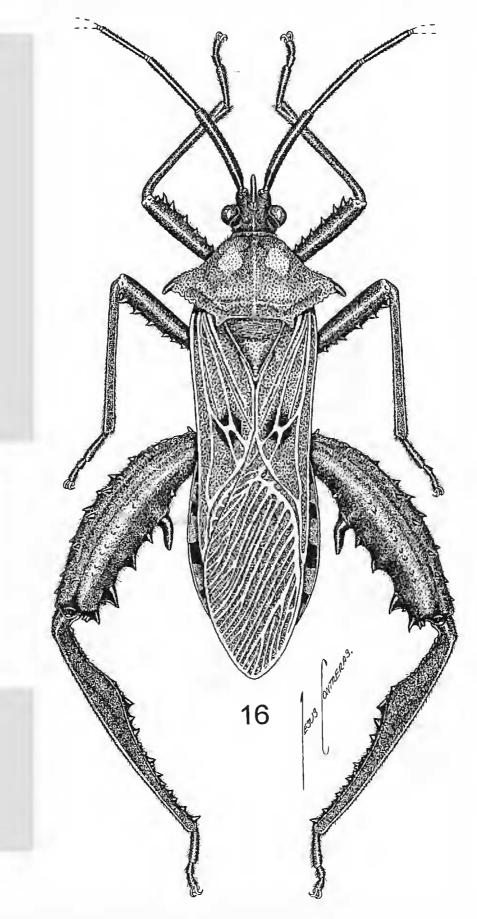


Figure 16. Dorsal view of Stenometapodus guttifer (Stål).

This species is distinguished from the other species of the genus by the following characters: antennal segments II and III plus clavus and corium entirely yellow; pronotal disc reddish orange with calli orange hazel and humeral angles yellow; abdominal sterna with broad rectangular spot orange yellow occupying the posterior margin of sterna III to VII and lateral to middle line; width across eyes conspicuously developed, longer than 2.70 mm; humeral angles of pronotum slightly expanded, and apically with short and robust spine (Fig. 5).

Distribution.—Only known from Brazil.

STENOMETAPODUS GUTTIFER (STÅL), NEW COMBINATION (Fig. 16)

Petalops guttifer Stål 1859: 456–457. Salapia guttifera, Stål 1868: 50.

Petalops guttifer Stål (1859) is known only from the male lectotype, here designated, which bears the labels "Brazil, Rio Janeiro, Berol, nr. 1476" and deposited in Museum der Humboldt Universitat zu Berlin, Germany. It was referred to the genus *Salapia* by Stål (1868), and here transferred to the genus *Stenometapodus* Breddin (1903) with the binomius *Stenometapodus guttifer*, NEW COM-BINATION.

This species clearly belongs in the widespread South American genus *Steno-metapodus* (Brailovsky 1984) by the following characters: hind tibiae expanded, and longer than abdomen, posterior angles of pronotum acute, scutellum usually with erect setae, and posterior angle of connexival segments V and VI spined. In *Salapia* the hind tibiae are simple and cylindrical, and never expanded.

KEY TO SALAPIA SPECIES

1.	Antennal segments II and III yellow to orange, with or without apical
	third black 2
1′.	Antennal segments II and III black to reddish brown
2.	Antennal segments II and III yellow to orange, with apical third black
2'.	Antennal segments II and III entirely yellow to orange
3.	Pronotal disc and scutellum pale orange hazel with wide longitudinal vitta
	creamy yellow; acetabulae pale creamy yellow S. signata (Dallas)
3'.	Pronotal disc and scutellum pale or dark orange hazel without creamy
	yellow longitudinal vitta; acetabulae orange hazel, and unicolorous
	with thorax
4.	Abdominal sterna III to VI with large pale yellow discoidal spot, laterally
	to midline; humeral angles broad, with short, robust spine (Fig. 4);
	triangular process broad, well developed (Fig. 4)
	S. egeri Brailovsky and Barrera, NEW SPECIES
4'.	Abdominal sterna III to VI without pale yellow discoidal spot; humeral
	angles narrowed, with acute, longer spine (Fig. 6); triangular process
	smaller, scarcely developed (Fig. 6)
	S. kondratieffi Brailovsky and Barrera, NEW SPECIES
5.	Humeral angles markedly expanded, with the spine longer and acute (Fig.
	7); triangular process of pronotum conspicuously developed (Fig. 7);
	acetabulae reddish brown; posterior margin of propleura, mesopleura
	and metapleura reddish brown
	S. onorei Brailovsky and Barrera, NEW SPECIES
5'.	Humeral angles scarcely expanded, with the spine shorter (Fig. 5); tri-
	angular process of pronotum smaller (Fig. 5); acetabulae creamy yel-
	low; posterior margin of propleura, mesopleura, and metapleura
~	creamy yellow
6.	Scutellum yellow to orange, with or without apex black
6'.	Scutellum black to reddish brown 10

1999

7.	Head and buccula black; thorax black to reddish brown
7'.	Head and buccula yellow to orange; thorax pale orange
8.	Femora black to reddish brown; pronotal disc entirely yellow
	S. luteola Brailovsky
8'.	Femora yellow to orange; pronotal disc not entirely yellow
	S. pretiosa Blöte
9.	Femora orange; clavus yellow to orange with broad longitudinal stripe
	black; corium yellow to orange with five black maculae between veins
9′.	Femora reddish brown; clavus black with basal third orange; corium
).	black with yellow irregular transverse fascia
10	
10.	Buccula black; thorax black to reddish brown
	Buccula yellow; thorax yellow to orange
11.	
	Abdominal sterna yellow to orange
12.	Antennal segment IV black; dorsal abdominal segments III to V black;
	anterolateral margin and anterior lobe of pronotum yellow
	S. caucalandia Brailovsky and Barrera, NEW SPECIES
12'.	Antennal segment IV yellow with basal and apical third reddish brown;
	dorsal abdominal segments III to V orange; anterolateral margin and
	anterior lobe of pronotum black
13.	Corium yellow to orange, with apical margin and elongate longitudinal
	stripe on endocorium black
13'	. Corium black, with or without transverse vitta yellow to orange 14
14.	Corium entirely black; antennal segment IV with small yellow ring
	S. abdominalis (Dallas)
14'	. Corium black with transversal vitta yellow to orange; antennal segment
	IV with broad yellow ring S. baraquini (Signoret)
15.	Pleural margin of abdominal sterna IV to VII bicolorous; clavus black
	to reddish brown with posterior third yellow; corium with yellow and
	broad transverse vitta
15'	. Pleural margin of abdominal sterna IV to VII unicolorous; clavus black
	or yellow, on the last condition with only the vein black; corium with
	slender or without yellow transverse vitta
16	Clavus black or reddish brown; corium black, with ochre, slender and
10.	irregular transversal vitta
16'	. Clavus yellow with the vein black; corium yellow to orange with the
10	apical margin and elongate stripe on endocorium black
	S. pallida Brailovsky
	5. punuu Dianovsky

ACKNOWLEDGMENT

We are indebted to the following individuals and institutions for the loan of specimens and other assistance relevant to this study: James K. Liebherr and E. Richard Hoebeke (Cornell University, Ithaca, New York); Boris Kondratieff (Colorado State University, Fort Collins, Colorado); R. L. Brown (Mississippi State University, State University, Mississippi); Giovanni Onore (Pontificia Universidad

145

Católica del Ecuador, Quito); Jurgen Deckert (Museum der Humboldt Universitat zu Berlin, Germany). Special thanks are extended to Jesus Contreras and Cristina Urbina for the preparation of dorsal view illustrations.

LITERATURE CITED

Brailovsky, H. 1984. Una nueva especie del Género Stenometapodus Breddin y algunas notas acerca de Empedocles tenuicornis (Westwood) (Hemiptera-Heteroptera-Coreidae-Acanthocephalini).
Anales Inst. Biol. Univ. Nal. Autón. México (1983), Ser. Zool., 54: 63–68.

Brailovsky, H. 1992. El Género Salapia con descripción de cuatro especies nuevas (Hemiptera-Heteroptera-Coreidae-Acanthocephalini). Anales Inst. Biol. Univ. Nal. Autón. México, Ser. Zool., 63: 47–59.

Breddin, G. 1901. Neue neotropische Wanzen. Soc. Ent., 16: 41-42.

Breddin, G. 1903. Beitrage zur Hemipteren fauna der Anden. Sitz. Ges. Nat. Freunde Berlin., 1903: 366–383.

Burmeister, H. 1835. Handbuch der Entomologie Zweiter Band: II Ordnung Rhynchota. Berlin: Theod. Ehr. Friedr. Enslin, i-iv: 1-400.

Stål, C. 1859. Till kannedomen om Coreidae. Öfvers. Kongl. Vet.-Akad. Förh., 16: 449-475.

Stål, C. 1868. Hemiptera Fabriciana I. K. Svenska Vet.-Akad. Handl., 7: 1–148.

Received 9 Sep 1998; Accepted 21 Apr 1999.